MISCELLANEOUS.

Observations on the Blistering Beetles of the Neighbourhood of Montevideo. By M. A. Courbon.

The author states that three species of blistering Cantharides are found in the neighbourhood of Montevideo,—namely the *Epicauta adspersa*, Dej. (*Lytta adspersa*, Klug), the *Epicauta cavernosa*, Reiche, and the *Causima vidua*, Dej. (*Lytta vidua*, Klug).

Of these, the first, the *Epicauta adspersa*, is superior even to the ordinary Cantharides (*Cantharis vesicatoria*) in its vesicating power, and possesses the additional advantage that its application produces no irritating action on the urinary organs, such as is usually caused by the common Cantharides. The author discovered this when treating a patient for acute hepatitis, by applying blisters upon the seat of pain; the *Epicauta adspersa* caused no inconvenience to the patient; but on one or two occasions, when blisters of the *Cantharis vesicatoria* were used, they produced the customary irritation of the urinary organs.

This species is exceedingly abundant in the immediate neighbourhood of Montevideo in the months of December, January, February and March, but especially in January and February. Its length is 13–16 millimeters (6½–8 lines); it is covered with minute grey scales, in the midst of which appear numerous small black points. The antennæ are black, and the feet yellow or reddish. It lives on the common Beet (*Beta vulgaris*, var. *Cicla*), and may be very easily collected, especially in the morning and evening, by taking a large sack with a few beet-leaves at the bottom of it to the places where this plant grows in abundance, cutting off the stems of the plants close to the root and shaking them into the sack. The insects may then be killed by exposing them to the vapour of vinegar, or by packing them closely in a glass vessel, closing them up hermetically, and exposing them to the heat of the sun.

The second species, the *Epicauta cavernosa*, is about the size of the preceding species, but is of a yellow colour, with three small black lines on the head, numerous small black points on the thorax, and large impressed black dots on the elytra. The legs are reddish. It is a rare species and occurs only on the *Eryngium paniculatum*, an umbelliferous plant which is very abundant on the Cerro de Montevideo. Its vesicating power is about equal to that of the common *Cantharis*.

The *Causima vidua* is a much larger species, measuring 22–27 millimeters (⅞ in. to 1 1/12 in.), and is entirely black, except an indistinct white border which sometimes occurs at the extremity of the elytra. It is found on two leguminous plants, *Adesmia pendula* and *A. punctata*, especially on the former; it devours the flowers. It occurs in the months of November, December and January. It is less abundant than the *Epicauta adspersa*, but may be collected in the same manner, and its vesicating power is at least equal to that of the officinal species. The author did not ascertain whether it acted upon the urinary organs.

The author adds that the vesicating power of these insects resides in all the soft internal parts, and not, as stated by M. Farines of the common Cantharides, only in the soft parts of the thorax and abdomen. He found that the internal parts of the head and thighs employed by themselves were as efficacious as those of the body, but the hard parts as usual were destitute of any action. He states that this applies also to the officinal species.—*Comptes Rendus*, Dec. 3, 1855, p. 1003.

UNUSUAL DEARTH OF ALGÆ IN 1855.

Devonport, 19th October 1855.

My dear Sir,—The present year has been marked by an unusual dearth of Algæ on all the Devonshire coasts, and this I have not only had evidence of myself, but it has also been noticed by *all* my correspondents, who are rather numerous.

A great many species, which for several successive years I have been in the habit of finding whenever I sought for them, with as much certainty as I should in going into my own garden to cut a cabbage, have altogether disappeared, that is, those plants growing between the extremes of high and low water marks. This unusual occurrence from the ordinary course, after careful consideration, I am inclined to assign to atmospheric influence.

The early months of the present year, not including those which we usually assign to winter, such as March, April and May, were exceedingly cold, and frosty nights were not unfrequent even in the latter end of May. Our lowest tides here occur at the advent of the new and full moon from about twelve to one o'clock. Plants beginning to grow *between the tidal limits* were thus exposed to a very low temperature during the night; but a very different result followed at the next low water, occurring at noon, twelve hours after. Here, those plants were subjected to the influence of a vertical sun, and these alternate changes from a high to an extreme low temperature, being followed up during many successive nights and days, had the effect of destroying them altogether. I am the more convinced that my views on this subject are correct, inasmuch as I found all the missing plants by dredging in deep water, and where they could not be affected by changes in the atmosphere.

Believe me, dear Sir, very faithfully yours,

Dr. J. E. Gray. John Cocks.

Observations on Echini *Perforating the Granite of Brittany.* By M. Valenciennes.

The attention of naturalists has always been awakened by the curious habit of many Mollusca and Zoophyta, of excavating cavities for their habitation in rocks often of great hardness and of very different natures. It was at first supposed that these perforating animals only attacked the calcareous rocks, which led several people to think that the erosion required to form the hole was assisted by the action of some acid. It has been admitted of necessity, however, that in particular cases the animals only employed mechanical means, as the Teredos and the Pholades and even the Sipunculi were found to